



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/608,053

06/27/2003

Michael J. Robinson

1925-1-3

7898

7590

08/17/2010

Jeffrey T. Haley
GRAYBEAL JACKSON HALEY LLP
Suite. 350
155-108th Avenue N.E.
Bellevue, WA 98004-5901

EXAMINER

SMITH, MARCUS

ART UNIT

PAPER NUMBER

2467

MAIL DATE

DELIVERY MODE

08/17/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/608,053	Applicant(s) ROBINSON, MICHAEL J.	
	Examiner MARCUS R. SMITH	Art Unit 2467	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/22/10.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19, and 34-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 34-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the appeal brief filed on 4/22/10, PROSECUTION IS HEREBY REOPENED. The new rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Jayanti K. Patel/

Supervisory Patent Examiner, Art Unit 2465

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the step of automatically determine the operating characteristics of handsets coupled to each

Art Unit: 2467

handset port must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

3. Therefore, the step of send a set of signals to each non-IP digital PBX telephone handset designed to produce a different response from each of a plurality of different proprietary handsets; process the response or responses that are received to identify the type of each non-IP digital PBX telephone handset; transmit information identifying each handset to a remote IP server; and receive from the remote IP server programming information to cause the gateway to work with each handset must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

Art Unit: 2467

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claim 1 is objected to because of the following informalities: The term "the operating characteristics" lacks antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. Claims 1-14, 44-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 states that the gateway is further configured to automatically determine the operating characteristics of handsets coupled to each handset port by, for each handset port, receiving a signal corresponding a coupled handset; transmitting information identifying the handset to a remote IP server via the IP port; and receiving, from the server, programming information to cause the gateway to work with the handset. In the applicant's specification on page 5, lines 10-20, states the gateway can automatically download a set of parameter or program instructions. In the Appeal Brief, the applicant states that function of automatically determines operating characteristics of handsets port is supported in specification by page 9, lines 15-27. In page 9 of the specification, there is no cited of the terms operating characteristics or automatically. But page 9 does show support that the gateway receives a response to identify the type of handset, then transmit that information to a server and receive programming information associated with that type

Art Unit: 2467

of handset. The examiner does not how the operating characteristics are determine in those steps unless the operating characteristics is equivalent to the type of handset or programming information. Since the claim does not describe the operating characteristics as the type of handset or programming information, the examiner views this claim and all its dependents as vague and indefinite.

Claim 46 is a dependent claim of independent claim 1. In claim 1, the applicant already states the signal receive from the handset is the response that identify the type of handset port. However claim 46 recites the method of claim 1 further configured to a receive a response from the handset, so the signal and response have same functional. Since the examiner can not tell the difference between the signal and response, this is claim is also vague and indefinite.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1-13, 15-18, 34-42, and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon (US 6,842,447) in view of Cave et al. (US 6,996,064) and Detlefsen et al. (US 6,205,208).

With regard to claims 1 and 34, Cannon teaches: A gateway for using non-IP digital PBX telephone handsets with an IP call controller, comprising: (a) one or more handset ports (telephone) for coupling to one or more non-IP digital PBX telephone handsets (column 3, lines 15-25); (b) an IP port for coupling to an IP network device (column 3, lines 20-25); and (c) a protocol translator (signal gateway, 47) circuit (column 4, lines 36-50) that (i) translates non-IP digital PBX telephone call control signals (ISUP messages) received at a handset port into IP telephone call control signals (SIP signals) for an IP telephone call controller and delivers them to the IP port (column 5, lines 1-15); and (ii) translates IP telephone call control signals received at the IP port from an IP telephone call controller into non-IP digital PBX telephone call control signals and delivers them to the one or more handset ports (column 5, lines 1-15).

Cannon discloses all of the subject matter as described above except for a handset port directly connected IP telephone call controller. Cannon has a PBX between the handset port and IP telephone call controller in the gateway.

Cave et al. also teaches a gateway that compress/translate from digital to IP signals and back from IP to digital signals (see figure 2: gateway 224 or 226) which is similar to gateway in Cannon. However, the gateway in Cave has a T1 trunk interface

Art Unit: 2467

that directly connects to any type of handsets (telephone, fax or data modem) (see figures 2 and 3: column 5, lines 35-67 and column 12, lines 40-65).

Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made to handset port directly connected to gateway as taught by Cave in the system of Cannon in order to efficiently limit bandwidth usage between packet switch and circuit-switched telephone systems(Cave: column 3, lines 45-60).

Cannon and Cave fails to disclose having the gateway configured to automatically determine the operating characteristics of handsets coupled to handset port, by, for each handset port, receiving a signal corresponding a coupled handset; transmitting information identifying the handset to a remote IP server via the IP port; and receiving, from the server, programming information to cause the gateway to work with the handset. However Cave teaches that the gateway determines the device type (voice or data or fax) for the network (column 12, lines 55-65).

Detlefsen teaches automatic system that dynamically identifies the type of service for each telephone devices (see abstract and figure 1). In figure 1B, the system sends the beacon signal through to devices to connect to T1/E1 interfaces (step 120: column 3, lines 50-67). Based on the response, the system can tell if the connection is to Fax device, voice device (telephone), or data modem (steps 122, 126: column 4, lines 1-6 and 17-25). Then the system finds/loads/calls the appropriate routine to execute associated the type of devices to process the session (see steps 124, 128, 130: column 4, lines 1-55). These routines are downloaded from a remote network server (column 6, lines 60-67).

Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made to use automatically determine the type of handset by sending a beacon signal through the handset port and receiving a response and then it will sending that information to a network server and the network server transmits the routine (programming information) as taught by Detlefsen in the system of Cannon and Cave in order to provide greater flexibility to digital communication interface (Detlefsen: Column 1, lines 35-45).

With regard to claims 15 and 17, Cannon teaches: A system wherein non-IP digital PBX telephone handsets are coupled to an IP telephone call controller in a public telephone network, comprising: (a) an IP telephone call controller (proxy server, 42, SIP server) operating a public telephone network according to public IP call control protocols and coupled to the global IP network (column 3, lines 30-35); (b) a gateway coupled to the global IP network at a location remote from the IP telephone call controller (column 3, lines 20-25); (c) one or more non-IP digital PBX telephone handsets coupled to the gateway via wires for carrying non-IP digital PBX telephone call control signaling between the handset and the gateway (column 3, lines 15-25); (d) the gateway having one or more protocol translating circuits that (column 4, lines 36-50): (v) translate non-IP digital PBX call control signals received from a handset into IP call control signals according to the public IP call control protocols of the call controller (column 5, lines 1-15) and (vi) translate IP call control signals from the call controller into non-IP digital PBX call control signals for a handset coupled to the gateway (column 5, lines 1-15).

Cannon discloses all of the subject matter as described above except for a handset port directly connected IP telephone call controller. Cannon has a PBX between the handset port and IP telephone call controller in the gateway.

Cave et al. also teaches a gateway that compress/translate from digital to IP signals and back from IP to digital signals (see figure 2: gateway 224 or 226) which is similar to gateway in Cannon. However, the gateway in Cave has a T1 trunk interface that directly connects to any type of handsets (telephone, fax or data modem) (see figures 2 and 3: column 5, lines 35-67 and column 12, lines 40-65).

Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made to handset port directly connected to gateway as taught by Cave in the system of Cannon in order to efficiently limit bandwidth usage between packet switch and circuit-switched telephone systems(Cave: column 3, lines 45-60).

Cannon and Cave fails to disclose having the gateway configured to automatically determine the operating characteristics of handsets coupled to handset port, by, for each handset port, receiving a signal corresponding a coupled handset; transmitting information identifying the handset to a remote IP server via the IP port; and receiving, from the server, programming information to cause the gateway to work with the handset. However Cave teaches that the gateway determines the device type (voice or data or fax) for the network (column 12, lines 55-65).

Detlefsen teaches automatic system that dynamically identifies the type of service for each telephone devices (see abstract and figure 1). In figure 1B, the system sends the beacon signal through to devices to connect to T1/E1 interfaces (step 120:

Art Unit: 2467

column 3, lines 50-67). Based on the response, the system can tell if the connection is to Fax device, voice device (telephone), or data modem (steps 122, 126: column 4, lines 1-6 and 17-25). Then the system finds/loads/calls the appropriate routine to execute associated the type of devices to process the session (see steps 124, 128, 130: column 4, lines 1-55). These routines are downloaded from a remote network server (column 6, lines 60-67).

Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made to use automatically determine the type of handset by sending a beacon signal through the handset port and receiving a response and then it will sending that information to a network server and the network server transmits the routine (programming information) as taught by Detlefsen in the system of Cannon and Cave in order to provide greater flexibility to digital communication interface (Detlefsen: Column 1, lines 35-45).

With regard to claims 2 and 35, Cannon teaches: wherein the protocol translator circuit is programmable such that it can be programmed to operate properly with each of a plurality of protocols for non-IP digital PBX telephone call control signals (column 4, lines 35-50).

With regard to claims 3 and 36, Cannon teaches: wherein the protocol translator circuit is programmable such that it can be programmed to operate properly with each of a plurality of protocols for IP telephone call controllers (column 4, lines 35-50).

Art Unit: 2467

With regard to claims 4-5, and 37, Cannon teaches: wherein the protocol translator circuit is programmed by IP download (Options) via the IP port (column 4, lines 1-10).

With regard to claims 6-7, and 38, Cannon teaches: wherein the download is initiated in response to establishment of an IP session between the gateway and an IP service (column 4, lines 1-18).

With regard to claim 8, Cannon teaches (see figure 2): wherein, upon receipt at a handset port of one or more predetermined non-IP digital PBX call control signals, instead of or in addition to translating the signal into an IP telephone call control signal, the protocol translator circuit returns a non-IP digital PBX call control signal to the handset port (column 5, lines 1-15).

With regard to claim 9, Cannon teaches (see figure 2): wherein the one or more non-IP digital PBX handset ports includes a first handset port and a second handset port wherein, upon receipt at the first handset port of one or more predetermined non-IP digital PBX call control signals, instead of or in addition to translating the signal into an IP telephone call control signal, the protocol translator circuit sends a non-IP digital PBX call control signal to the second handset port (column 5, lines 1-15).

With regard to claim 10, Cannon teaches (see figure 2): wherein the call control signals are for establishing a voice conference that includes the first and the second handset ports (column 3, lines 15-35: connecting the telephone, coupled to switch 59, to the telephone, coupled to switch.).

With regard to claims 11 and 41, Cannon teaches: further comprising an address registration circuit that assigns (IAM message) an address for IP communications to each handset port to which a non-IP digital PBX telephone is coupled (column 3, lines 35-50) and registers (REGISTER message) each address for IP communications with the IP telephone call controller (SIP Server: column 4, lines 1-15).

With regard to claim 12, Cannon teaches: further comprising a registration circuit that registers (REGISTER message) the gateway with the IP telephone call controller (SIP Server) for subsequent system management (column 4, lines 1-15).

With regard to claims 13, 16, 18, and 42, Cannon teaches (see figure 1): further comprising: routing non-voice IP data packets between the IP port and one or more IP sub-ports (personal computers, 39: column 3, lines 20-25); while providing quality-of-service preference to voice IP data packets translated to and from handset ports coupled to non-IP digital PBX telephone handsets (column 3, lines 256-33).

With regard to claims 39, Cannon teaches (figure 6): further comprising: receiving at the handset port a third non-IP digital PBX call control signal (column 5, lines 15-42); and returning a fourth non-IP digital PBX call control signal to the handset port without delivering a corresponding IP telephone call control signal to the IP port (column 5, lines 15-42).

With regard to claim 40, Cannon teaches: further comprising: receiving at a first handset port a fifth non-IP digital PBX call control signal (column 5, lines 1-16); and sending a sixth non-IP digital PBX call control signal to a second handset port (column 5, lines 1-16).

Art Unit: 2467

With regard to claim 44, Cave teaches: wherein the one or more handset ports, IP port, and protocol translator circuit are disposed in a single housing (see figure 2: column 5, lines 35-67).

With regard to claim 45, Cave teaches: wherein the one or more handset ports, IP port, and protocol translator circuit are configured to communicate through a fully digital signal path (see figure 3, column 12, lines 40-65).

With regard to claim 46, Detlefsen teaches (see claim 1 and 15 for details).

9. Claims 14, 19, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon, Cave, and Detlefsen as applied to claims 1/34 above, and further in view of Bailis (WO 00/11818 see IDS 6/27/03)..

With regard to claims 14 and 43: Cannon, Cave, and Detlefsen fails to disclose an external form of a plug-in card for an IP telephone call controller where the IP port has an external form for coupling to contacts in said IP telephone call controller.

Bailis teaches a switch that Internet telephone gateway, 54, with Network server, 62, as a plug-in card on the switch's backplane in order to lower the cost of the parts and management of the system (see page 5 of the detail description).

Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made to have Network server plug card on the switch (gateway) as taught by Bailis in the system of Cannon, Cave, and Detlefsen in order to lower the cost of the parts and management of the system.

Art Unit: 2467

With regard to claim 19, see claims 14-15 for the detailed explanation of the combination of Cannon, Cave, and Detlefsen and Bailis.

Response to Arguments

10. Applicant's arguments with respect to claims 1-19, and 34-46 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Greaves et al. (US 7,072,056) and Fukuju et al. (US 6,671,375).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCUS R. SMITH whose telephone number is (571)270-1096. The examiner can normally be reached on Mon-Thurs: 8:30 am - 5:00 p.m. and Friday is a telework day.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pankaj Kumar can be reached on 571 272-3011. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2467

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRS 8/14/10

/Michael J. Moore, Jr./
Primary Examiner, Art Unit 2467